Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

young and vigorous trees furnishing the whiter wood.—H. F. BASSETT.

[These differences in the wood, in this and other trees, are not accompanied by recognizable differences in their foliage, etc.; they are not even *botanical* varieties: the cause of the difference is unknown.—EDS.

WASPS CARRY OFF STAMENS BODILY.—Ch. Morren, of Belgium, is the authority for the statement, that, having noticed that the stamens and pistils of certain Fuchsias were unaccountably removed, he set a watch and found that they were carried off by wasps; and the wasps were observed flying about the garden with the stamens in their mandibles. *Vespa nidulans* was the culprit. What use they make of them is not explained.—*Gard. Chronicle, April* 15.

◆

ZOOLOGY.

ANATOMY OF THE SKUNK.—As lizards, toads and snakes had become nice playthings, I had a desire to test the virtues of a skunk with the dissecting knife. Boys and others had skinned the animal by the thousands; so I thought that task not very formidable, and at it I went. The truth is it was not the nicest job I ever did in my life, and the fellow was as fat as his skin could hold; for I got four pounds of the purest, most pliable oil I ever saw. It was mainly pure oleine, with a little margaric acid—as good as neat's foot oil for harness and boots, but with no medical virtue.

I approached the vital organs of the Mephitis with suitable care. I first examined the teeth, as being furthest off. Next I cut off the shoulder and breast just back of the ribs. The lungs were large, the heart fully developed, and the liver enormous. The stomach contained the crop and intestines of at least one of my Thanksgiving pot-pie chickens; so it gave no light on its usual food, except that chickens' corn, oats and flesh were there. The intestines were very broad, and seemed as if mainly made of colon, with hardly a trace of jejunum or ileum. The kidneys were remarkably large, but neither by odor nor by the microscope, showed any singularity; their internal portions were very like those in man.

I approached the pelvis with great caution, and almost superstitious fear. I disjointed first each femur, and left bare the innominata, with the posterior fleshy attachments that contained the essential virus. I examined the cavity of the pelvic bones, without any peculiar result, and at last detached all except the hard, muscular pouches and the common fundamental aperture. These I carefully cut loose, and thus reduced the formidable animal to the last and least parts possible, and they seemed totally inadequate to explain the well known effect this animal produces. I next boldly severed, longitudinally, the rectum and anus; nothing was to be seen worthy of remark, except two teat-like projections in two volcanic or crater-like cavities that seemed suggestive of what might happen. So I cut away all the remaining superfluous parts, and at last had the anal lips, two muscular pouches, and several small glands connected with them. My fortitude here giving out, and it growing dark, I adjourned the matter to the next day.

When I resumed operations, on the parts now weighing only about two ounces out of a Mephitis of nine pounds, I had a strip of skin with the anal lips, the suspicious calices or cones in their cup-like cavities, and the pouches. Microscope was at hand, magnifying glasses, spectacles, and dissecting case that had done much human duty. I began by severing the two muscular pouches, and found no connection between them. Books say, "The animal gives its peculiar and penetrating odor from two glands, situated external to the pelvis." I found the "glands" to be *clear muscular fibre*, with not a particle of smell, or a trace of any glandular structure. So much truth there is in old sayings, repeated for years or ages past! Further to test the matter, I cut slowly to the middle of the mass of *muscular*, not *glandular*, fibres, and came upon a thick, white, leathery capsule, like the crop of a chicken, with the source for the contents, provided by the little glands about it. Now putting on old clothes, and sitting to the windward, I cut through this white capsule; a bright yellow fluid came out, and I instantly felt that "distance would lend enchantment to the view." But I was not to be baffled. So I dipped the point of my scalpel in the yellow fluid, put the tenth or twentieth of a drop of it on a glass, covered it with another strip of glass, and placed it under a power of forty diameters in my microscope. The appearance was peculiar. It looked like molten gold, or like quicksilver of the finest golden color. Pressure on the strips of glass made it flow like globules of melted gold.

By a power of sixty diameters the same color still appeared, but seemed as if it would by a higher power resolve itself into globules, with some peculiar markings. I tried all the combinations of lenses I had, but could only say: "Oh, that I had a friend to give me a five hundred dollar microscope! Oh, for a lens that would show what this almost resolvable gold is made of!" To the eye, the peculiar and odoriferous secretion of this animal is of a pale bright or glistening yellow, with specks floating in it. By the microscope it looks like a clear fluid, as water with masses of gold in it, and the specks like bubbles of air, covered with gold, or rather bags of air in golden sacks. The air I take to be the gas nascent from the golden fluid. Had I known that my interest in the dissection would have rendered me so forgetful of the pungent surroundings, I would have had chemical reagents to test the substance so easily obtainable.

Another thing was a matter of interest. If I correctly made out the capsule of fluid, the commonly called "glands" are the muscular tunic enveloping and capable of compressing the reservoir, and their sole use is to eject the liquid. The teat-like projections have one large orifice for a distant jet of the substance, and also a strainer, with numerous holes — like the holes in the cones in the human kidney — for a near but diffusive jetting of the matter. The substance is secreted by small glands, dark in color, and of small calibre, connected with the capsule by narrow ducts.—J. S. PARKER, M.D., *in Country Gentleman.*

THE NEST OF THE PIGEON HAWK. — In the March number of the AMERICAN NATURALIST, Vol. V. page 56, Dr. Brewer questions a statement of Mr. Winfred Stearns concerning *the position* of the pigeon hawk, and says that "*in hollow trees*" "is a condition in which the nest of a pigeon hawk is never found." On page 537 of Vol. IV. of the AMERICAN NATURALIST, I mention that "in May, 1863, a nest of this species (Hypotriorchis columbarius) with young birds just able to fly, was found *in* a large sycamore, on Duch Island, Delaware River, near Trenton, N. J." Now I then stated *in* the tree, not on it; and such was the exact truth of the matter, and I can hardly see how so widely different birds as this and the *Tinnunculus sparverius* could be confounded. Possibly Mr. Stearns may have done so; but I did not. The sycamore in question is a very large tree, with a hollow in it some eight feet from the ground, in capacity about equal to a flour-barrel, and with an opening not over six inches in diameter, situated nearly in the centre; corresponding very well to the bung-hole of an ale cask. The irregular floor of this hollow was slightly smoothed with a large mass of twigs; the finer at the surface, and intermingled with hair, feathers and grass. The bottom of the nest was about a foot below the lower edge of the opening. Once since 1863, the pigeon hawks have occupied this tree; and *twice* since, the sparrow hawk. During the other five seasons, I did not visit the locality, or, at least, have no notes of having examined the tree, but seeing no pigeon hawks elsewhere, doubt if they have occupied the locality since 1865. Should they reappear during the coming spring, I shall endeavor to secure birds and eggs to settle the question of the species I have designated "pigeon" hawk.

"The nest with eggs, discovered February 22d, 1865, *in* an elm tree" was more properly *on* the tree, but so sheltered by a curious twisting and overlapping of branches, that its situation would incline one not conversant with the bird's habits, to believe that it *usually* built within the body of a tree, rather than upon the branches or in an open situation.

Dr. Brewer very truly states, " the horizon of one man is at the best very limited, and many ornithological facts occur that are not dreamed of in his philosophy.". Indeed, considering the influence that circumstances surrounding an individual must exert, I feel surprised at times at the apparent regularity of habits; but have nevertheless given up every text book as an infallible exponent of the manner of this or that animal's life. I have recorded many instances of peculiarity in bird nesting which I have hesitated to publish, as they might to others seem to border on the Munchausen order of narratives; but when they occur to others, to my knowledge, then I am ready to corroborate, by giving similar cases as occurring in my own experience. As a sample of what seems really incredible, and yet was witnessed by myself, I will mention that I once saw a pair of wrens drive off a pair of song sparrows from their nest which was just finished, *cover it with a leaf from a Pawlonia, which they fastened by perforating it with the ends of the upper twigs of the nest, and then cut a hole in the leaf for an entrance.* In a few days the leaf withered, became brittle, and finally was broken up and scattered; and the wrens reared a brood of seven in an open nest. Curious as such instances may be, they have no instruction in them, that I can see, and therefore is it desirable to jeopardize one's reputation by giving them publicity?

The past winter has been unusually cold, and the effect on the ornithic fauna perceptible. The great white owl (*Nyctea nivea*) has been quite abundant, seven having been killed near Trenton and sent to one taxidermist. The snow bunting (*Plectrophanes nivalis*) has been more abundant with us than ever before; and so with other northern species that in winter visit us in varying numbers.—CHAS. C. ABBOTT, M. D., *Trenton, N. J., March* 9, 1871.

[As Mr. Stearns has stated that he was mistaken in the identification of his bird (see p. 253), and thus thrown doubt on the supposed variation in habits of the Pigeon Hawk, we trust Dr. Abbott will settle the identity of his birds beyond question should they occupy the hole in the tree again.—EDS.]

SPIKE HORNED DEER.—As the impression seems still to exist in the minds of some persons, that the spike horn deer is a distinct variety, I must ask for a little more space in your pages to give a few more facts in relation to them, and I have done.

In the first place, I have found, in my study of natural history, that the statements of hunters, both professional and amateur, must be taken with allowance, not so much from their desire to misrepresent, as to their want of knowledge of natural history, anatomy, and the habit of trained observation. They jump at conclusions which upon careful investigation prove to have no foundation.

Some years ago, when I was investigating the question of the Pronghorn Antelope shedding its horns, I wrote to a gentleman, a great sportsman, connected with the army, and who had been stationed for many years on the Plains, for any facts that he could give me in relation to it. He wrote back, that he had hunted the antelope at all seasons of the year, for twelve years, and he *knew* that they *did not* shed their horns. Before the letter reached me I saw an antelope, that had been kept in confinement, shed its horns.

When I was on the Plains, the hunters told me that there were two kinds of bison,* one on the Plains and one which they called the wood buffalo, which was never found in herds, but singly;

---

* See reference to this on p. 221 of this Number. The foot-note given on that page was intended to call attention to the statement made above, but by mistake a reference is given to another page.—EDS.

this animal they said was larger than the others. Upon investigation these proved to be old bulls, who had separated from the herd and lived by themselves.

The hunters in Maine used to assert that there were two kinds of moose, a grey moose, and a black one. This difference has proved to be only the effect of age and condition.

Some years since, while hunting in Nova Scotia, I was told by some of the most experienced hunters that there were two kinds of carribou; one they called the sword carribou, from the shape of its horns. It was my good fortune to procure a fine large specimen; upon careful examination I found that it was simply a three year old carribou, whose horns had not yet become palmated; I have the head and horns in my collection. While on this same expedition one of the party shot a moose whose horns were only prongs; this animal measured six feet, nine inches in height to the top of the shoulder. I should think that any one would have said that it was a full grown animal, and yet it proved upon examination of teeth, etc., to be only three years old. I have the head, and it is a little larger than another moose head that I have, whose horns spread five feet and have twenty-four points.

These facts prove that it is possible for a deer to get his full growth before he acquires a full pair of horns. The differences of length of leg, shape of horn, fineness of coat, color, etc., are only individual peculiarities, and are to be found among all species of deer. The *Cervus leucurus* of the Plains is only the *Cervus Virginianus*, and not a distinct species, the difference of name originating with an English Naturalist who had not seen the deer of the Atlantic States. Careful observers will find as much individuality among deer as are found among horses and other animals. These facts should make us careful not to jump at conclusions from mere outward appearance, without patient anatomical examination. — W. J. HAYS, *New York*.

ALBINO SWAMP BLACKBIRD. — A beautiful specimen of an albino Swamp or Red-wing Blackbird (*Agelaius phoeniceus* Vieillot) was shot in July, 1870, on the Detroit river, near Lake St. Clair. Its entire plumage was white with the exception of a patch of crimson feathers on each shoulder. It was a young bird, and of small size, and seemed to me sickly-looking. — HENRY GILLMAN, *Detroit, Michigan.*

PELICANS.—In the February number of the AMERICAN NATURALIST (1871) is a communication from Detroit, describing a remarkable specimen of the White or Rough-billed Pelican, which was shot on Lake Huron, and the writer appears to think that the occurrence of this bird on the great lakes is a very rare thing. The size of the specimen described by Mr. Gilman was certainly remarkable, far exceeding anything in my experience. The largest specimen that I ever measured was ninety inches in alar extent, less by eighteen inches, than Mr. Gilman's specimen. This was killed during the present winter in East Florida, and was considered by hunters who saw it, as very large. It was a male in full nuptial plumage and was a magnificent bird.

The White Pelican, *Pelecanus erythrorhynchus*, was formerly not uncommon at the South end of Lake Michigan. I myself possessed a fine male which was killed within the present limits of the city of Chicago in 1840, by Dr. John T. Temple, then of that city, when we were shooting ducks together on the river. I stuffed and mounted the bird and had it for several years in my collection. At that time the white pelican was frequently seen on those waters, though like the swan, it has now disappeared before the march of settlements.

In East Florida, the Brown Pelican, *P. fuscus*, a smaller bird, is most numerous; you will see twenty of these to one of the white species. They both breed in that region, and lay their eggs on the sand bars and lonely islands. At the Inlets of the Hillsboro and the Indian rivers, I have seen flocks of the brown pelican which must have contained several hundreds. They roost on the mangrove trees in the creeks, almost breaking down the branches with their weight, and covering the ground with their droppings. Regularly at young flood they wing their way to the Inlet to fish. This the brown pelican does by diving from a great height, while the white species swims with open bill upon the schools of fish, which it scoops up as with a net into its capacious pouch.

In the Indian river is an island upon which the pelicans breed in vast numbers. A party of hunters visited it this year in March, and found it covered with eggs and young birds, which were being fed by the old ones with fish. Some of these were shot, and most of the others driven away, when suddenly the island was invaded by multitudes of the Fish Crow, *Corvus ossifragus*, which began to devour both the eggs and the callow young, deprived of their natural protectors. The hunters then turned their guns upon the crows, and slaughtered them in heaps, before they would abandon their prey.* — S. C. CLARKE.

THE PIGEON HAWK. CORRECTION. — When first finding the nest and eggs of which I sent notice to the NATURALIST (September number), I was fully convinced I had discovered a new ornithological fact, and I was confirmed by several persons to whom I told the facts and showed the eggs; I hastened to report, and to call forth facts from other quarters in regard to this hawk. I have since carefully investigated the case, and find I was in the wrong — that the nest was that of the *Sparrow* Hawk, which breeds quite often here. To be sure I also sent one of my eggs to Dr. Brewer, Boston, for identification. He states that the egg is unquestionably that of the Sparrow Hawk, of full size, and unusually well marked; that the parent must have been an old bird, and much in heat when the egg was laid. Mr. Brewer compared it with a number of eggs of the Sparrow Hawk and Pigeon Hawk, and states that it has no resemblance to the latter, and compares with a great number of the former. There can be no question that I have made a great mistake, but I beg that it will be taken only as a mistake.— WINFRID A. STEARNS.

PRESERVATION OF SEA-FOWL. — The rapid diminution in the number of sea-fowl on the coast of Great Britain, of the gulls especially, in consequence of the wanton destruction of the birds and their eggs by summer tourists, induced Parliament to pass a law, a few years ago, imposing a heavy fine upon all offenders, during certain months. The economical argument adduced in favor of this restriction, was that the birds themselves destroyed great quantities of insects in the fields, and served as scavengers for the removal of putrid flesh on the shore; and also, that by their cries over their feeding grounds, usually in shallow, rocky places, the sailors were warned during fog, of their approach to such localities, and thus enabled to act accordingly. Of the reasonableness of the first mentioned plea we have ample evidence in our own country, since, on more than one occasion, the crops in Utah have been saved, by means of the immense flocks of gulls, which came to the rescue from their different abodes on the Great Salt Lake, and other bodies of water of the central basin. The result of the enactment is just beginning to make itself manifest in a greatly increased abundance of sea-fowl on the English coast, where they are said to be many times more numerous than heretofore, and to be much more tame, coming close to the fishermen while cleaning their fish, almost as familiarly as domestic fowl; swimming freely among the boats within reach of the hands and enjoying a gratifying immunity from disturbance. It is even asserted by some, that before the passage of the act, they were much tamer on Sunday, seeming to be aware that by the customs of society, and the restriction in regard to the use of guns, they were safer on that day than any other.

---

*We copy the following from "The Birds of North America," by Baird, Cassin and Lawrence, pp. 869 and 870.

White Pelican. Total length, 70 inches, wing 24.50. *Habitat.* Throughout the United States, rare on the coasts of the Middle and Northern States. Fur countries up to the 61st parallel. There is no observable difference between specimens from the Pacific and Atlantic coasts. The species breeds in the fur countries, generally selecting inaccessible places in the neighborhood of waterfalls. They also inhabit throughout the Rocky Mountains and in California. In winter they are very abundant on our southern coasts, from Texas to Florida.

Brown Pelican. Length of male 56 inches; wing, 22. *Habitat.* From Texas to North Carolina; California coast. The Brown Pelican is a permanent resident of our southern coast and shores of the Gulf of Mexico; also of California. Their nests are placed on trees, and also on the ground.—EDS.

IDENTITY OF THE AMERICAN AND EUROPEAN BISON. — Professor Brandt of St. Petersburg, in a recent paper, renews the expression of his opinion in regard to the identity of the American and European Bison, both of them in his view being the lineal descendants of the fossil Bison of a now extinct form. The only appreciable differences between the American and European races, according to Professor Brandt, are in the much larger mane and the more developed beard of the American animal, a characteristic, which, in view of similar differences in the manes of lions in different regions, not otherwise distinguishable, he considers of little importance. It may be proper, however, to say that a careful comparison of the crania of the two forms, exhibits differences of a much more tangible character; the relationships of the nasal bones not agreeing at all, and the muzzle of the American animal being much broader than that of its European Congener. According to Mr. Waterhouse Hawkins also, while the tail of the American Bison has the hairs close pressed, with a bushy tuft at the end only, that of the European animal is full and rather bushy from the root, being much the same difference as that existing between the tails of the American Mule or Black-tailed Deer (*Cervus macrotis*), and our common eastern Virginia Deer. — ⁂